REMARKS

Claims 1-15 were pending in this application. By this Amendment, Applicants have amended claims 1, 2 and 8-11 and added new claim 16. In addition, claims 12-15 have been withdrawn from consideration. Accordingly, claims 1-11 and 16 are submitted for reconsideration.

In the Office Action, claims 1-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicant admitted state of the art (hereinafter 'the AASA') in combination with Vijayakumar et al. (U.S. Patent 4,751,149) or Wernberg et al. (U.S. Patent 5,258,204). Claim 1, as amended, recites that a method of manufacturing a substantially continuous circumferential coating on a non-planar substrate comprises utilizing a substantially non directional gaseous deposition technique and a substantially static substrate deposition geometry to deposit said coating on said non-planar substrate.

In the rejection, the Examiner admitted that the AASA fails to teach a non-directional vapor deposition process, but asserted that Vijayakumar et al. and Wernberg et al. both cure this deficiency. However, even if combinable, the combination of the AASA and Vijayakumar et al. or Wernberg et al. fails to disclose or suggest the invention recited in claim 1.

Not only does the AASA fail to teach a non-direction vapor deposition process, it also fails to disclose or suggest a method of manufacturing a continuous circumferential coating on a non-planar substrate utilizing a substantially static substrate deposition geometry, as recited in claim 1. Rather, as described in the Background of the Invention, the AASA required rotation of the optical fiber to achieve a continuous circumferential coating, and thus fails to disclose or suggest using a static substrate deposition geometry.

Vijayakumar et al. and Wernberg et al. similarly fail to disclose or suggest a method of manufacturing a continuous circumferential coating on a non-planar substrate utilizing a substantially static substrate deposition geometry, as recited in claim 1. In addition, neither reference discloses or suggests using a deposition technique which is non-directional. In

fact, Wernberg et al. discloses certain directional effects of the deposition technique used. Specifically, Wernberg et al. discloses on column 6, lines 47-49 that "the substrate 14 may be oriented horizontally or, preferably, is tilted toward the incoming precursor vapour." Other "directional" aspects of the deposition method disclosed in Wernberg et al. include the description in relation to "comparative example 2" (column 8, lines 30-64), which discusses non-uniformities of the deposition process along a substrate as a function of distance of certain portions on the substrate from the entrance of the reactor. Wernberg et al. thus discloses a directional deposition technique, and fails to disclose or suggest using a non-direction deposition technique as recited in claim 1. Similarly, Vijayakumar et al. fails to disclose or suggest any non-directional characteristics of its disclosed deposition technique.

Moreover, the types of substrates disclosed in Vijayakumar et al. and Wernberg only disclose deposition on planar substrates. In Wernberg et al., the examples include a (1102) sapphire substrate 12 (column 7, line 39), and (0001) sapphire substrates (column 7, line 52). Vijayakumar et al. similarly discloses that the polycrystalline boron containing zinc oxide has an X-ray diffraction pattern corresponding predominantly to (002) orientation with respect to the plane of the substrate (column 4, lines 20-25). Clearly, these are specifications of planar substrates, i.e., substrates that have a planar surface of defined crystallographic orientation. Such substrates are typically, if not exclusively, provided in a wafer form i.e., planar discs or the like. Another clear indication that these references refer to deposition on planar substrate structures is the continuing reference to epitaxial growth, i.e., a growth mode where the deposited firm grows with the substantially same crystallographic, planar structure as that exhibited by the substrate.

Accordingly, like the AASA, both Vijayakumar et al. and Wernberg et al. fail to disclose or suggest utilizing a substantially non directional gaseous deposition technique, as recited in claim 1. Moreover, as discussed above, both Vijayakumar et al. and Wernberg et al. also fail to disclose or suggest a method of manufacturing a continuous circumferential coating on a non-planar substrate utilizing a substantially static substrate deposition geometry, as recited in claim 1. Rather, both references only disclose a

directional deposition process on a planar substrate. In fact, in the case of Wernberg et al., the deposition process involves tilting the substrate toward the incoming vapor, and thus does not use a substantially static substrate deposition geometry. Therefore, for all of these reasons, claim 1 is patentably distinguishable from the combination of the AASA and Vijayakumar et al. or Wernberg et al.

Claims 2-11 are also patentably distinguishable from the combination of the AASA and Vijayakumar et al. or Wernberg et al. by virtue of their dependence from claim 1, as well as their additional recitations. New claim 16 is patentably distinguishable from the combination of the AASA and Vijayakumar et al. or Wernberg et al. for at least the same reasons as claim 1.

Applicants respectfully submit that the application is in condition for allowance and request reconsideration. Should there be any questions or concerns regarding this application, the Examiner is invited to contact Applicants' undersigned representative by telephone.

Respectfully submitted,

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